# Fuels Coolants Lubricants etc. Capacities

Vehicle components and their respective lubricants must match.

Therefore use only brands tested and recommended by us.

Inquire at your authorized MERCEDES-BENZ dealer.

		Capacity	Fuels, coolants, lubricants, etc.
Total oil capacity in case of engine oil and filter change		8.0 I/8.5 US qt	Ambient temp. SAE grades  oF oC
Automatic transmission	Federal version	Initial fill: 7.3 I/7.7 US qt Fluid change: 6.2 I/6.6 US qt	
	California version	Initial fill: 7.1 I/7.5 US qt Fluid change: 6.0 I/6.3 US qt	Automatic transmission fluid for automatic transmission <sup>2</sup>
			<sup>2</sup> Any authorized MERCEDES-BENZ dealer will advise you

on recommended brands

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	Capacity	Fuels, coolants, lubricants, etc.
Rear axle	1.0 I/1.1 US qt	Hypoid gear oil SAE 90, 85 W 901
Accelerator control linkage		Hydraulic fluid
Power steering	1.4 I/1.5 US qt	Automatic transmission fluid for power steering <sup>1</sup>
Front wheel hubs	approx. 60 g each/2.1 oz each	High temperature roller bearing grease
Grease nipples		Multipurpose or lubrication grease
Door locks	:	Powdered graphite
Battery terminals		Bosch special grease
Brake reservoir	approximately 0.5 I/0.5 US qt	Brake fluid¹
Windshield washer system	approximately 3.0 I/3.2 US qt	Windshield washer solvent
Fuel tank including a reserve of	approximately 80 I/21.1 US gal approximately 10.5 I/2.8 US gal	Diesel fuels acc. to ASTM D 975 grades 1 and 2 as well as VV-F-800 a grades 1 and 2
Cooling system	12.5 I/13.2 US qt	Coolant <sup>1</sup>

Any authorized MERCEDES-BENZ dealer will advise you on recommended brands

# **Engine Oils**

Engine oils are specifically tested for their suitability in our engines. Therefore, use only engine oils recommended by us. Information on recommended brands is available at any authorized MERCEDES-BENZ dealer. On a new vehicle, the engine is filled with break-in oil in the factory. This oil is specially developed for the specific operating conditions during the first  $1300-1600\ km/800-1000\ miles$ .

A recommended engine oil may be used for topping up if the oil level drops below the dipstick minimum mark prior to the first service 1300 - 1600 km/800 - 1000 miles.

## **Brake Fluid**

During the course of the operation of the vehicle, the boiling point of the brake fluid is continuously reduced through the absorption of moisture from the atmosphere. Under extremely hard operating conditions, this moisture content can lead to the formation of vapor in the system, thus reducing the system's efficiency. The brake fluid must therefore be replaced annually, preferably in the spring. It is recommended to use only brake fluid approved by MERCEDES-BENZ.

Your MERCEDES-BENZ dealer will provide you with additional information.

#### **Diesel Fuels**

Use only commercially available vehicular diesel fuels No. 2 or No. 1 (ASTM D 975 No. 2-D or No. 1-D).

### Caution:

Diesel Fuel Additives in Vehicles Certified for California Operation

Beginning with 1985 models, California-Version Diesel Engine vehicles are equipped with a Trap Oxydizer. If you use non-approved fuel additives, the Trap Oxydizer could be damaged, resulting in severe engine power loss and expensive repairs, not covered under the new vehicle warranty.

See your authorized MERCEDES-BENZ dealer to find out if approved additives are available for special operating conditions.

Change engine oil in compliance with section "Engine Oil Change and Oil Filter Service" if diesel fuels are used whose sulphur content exceeds 0.5 % by weight. Marine diesel fuel, heating oil or the like must not be used.

At very low temperatures the fluidity of No. 2-D diesel fuel may become insufficient due to paraffin separation. To avoid malfunctions, No. 2-D diesel fuel of a lowered cloud point is marketed during the cold season.

At temperatures below 0° C/+32° F use winterized or No. 1 diesel fuel only. If not available, a certain quantity of kerosene may be added. Mixing only to be done within the cars' fuel tank. Kerosene has to be filled in before the diesel fuel.

Engine power may drop according to the proportion of kerosene. For this reason, keep percentage of kerosene added to the minimum necessitated by the ambient temperature.

The following table can be used as a reference, if adding of kerosene becomes necessary. The mixing ratios shown refer to the total mixture.

Even in extreme climatic conditions, the maximum mixture ratio should not exceed 50 %.

Adding of kerosene to No. 1-D diesel fuel is not recommended even at low temperatures.

# Warning!

Always follow basic safety rules when working with any combustible material. Do not fill the fuel tank or mix diesel fuel and kerosene when smoking, near an open flame or while the vehicle's engine is running. An explosion or fire can result.

Ambient temperature	No. 2 Diesel Fuel %	Kerosene %
0° C to -10° C/ +32° F to +14° F	70	30
below -10° C/ +14° F	50	50



### Coolants

The engine coolant is a mixture of water and anticorrosion/antifreeze, which provides:

- corrosion protection
- freeze protection
- boiling protection (by increasing the boiling point).

The cooling system was filled at the factory with a coolant providing freeze protection to  $-30^{\circ}$  C/ $-22^{\circ}$  F and corrosion protection. The red area of the temperature gauge is matched to the heating properties of this coolant solution.

The coolant solution must be used year round to provide the necessary corrosion protection and increase in the boil-over protection. You should have it replaced every 3 years.

To provide the important corrosion protection, the solution must be at least 33 % anticorrosion/antifreeze (equals a freeze protection to  $-20^{\circ}$  C/ $-4^{\circ}$  F). If you use a solution that is more than 55 % anticorrosion/antifreeze (freeze protection to

 $-40^{\circ}$  C/ $-40^{\circ}$  F), the engine temperature will increase due to the lower heat transfer capability of the solution. Therefore, do not use more than this amount of anticorrosion/antifreeze.

If the coolant level is low, water and M-B anticorrosion/antifreeze should be used to bring it up to the proper level (have cooling system checked for signs of leakage).

The water in the cooling system must meet minimum requirements, which are usually satisfied by normal drinking water. If you are not sure about the water quality, consult your authorized MERCEDES-BENZ dealer.

### Anticorrosion/antifreeze

Your vehicle contains a number of aluminium parts. The use of aluminium components in motor vehicle engines necessitates that anticorrosion/antifreeze/coolant used in such engines be specifically formulated to protect the aluminium parts. (Failure to use such anticorrosion/antifreeze/coolant may result in a significantly shortened service life.)

While there may be a number of anticorrosion/antifreeze/coolants available which will provide the requisite protection, all such products have not been tested for MERCEDES-BENZ vehicles. The following product, however, is recommended for use in your car: MERCEDES-BENZ Anticorrosion/Antifreeze Agent.

Before the start of the winter season (or once a year in the hot southern regions), you should have the anticorrosion/antifreeze concentration checked. The coolant is also regularly checked each time you bring your vehicle to your authorized MERCEDES-BENZ dealer for maintenance service.

Freeze protection	Anticorrosion/ antifreeze
-30° C } -22° F } -40° C } -40° F }	5.50 I/5.8 US qt 6.50 I/6.9 US qt